X-RAY LOCALIZER LIGHT SYSTEM

Abstract of Disclosure

An X-ray localizer light system comprises: a long life X-ray localizer light source; an optical concentrator, the light source being situated at a first focal spot, the optical concentrator being configured for concentrating X-ray localizer light from the light source to a second focal spot; and an opaque shield having an aperture therein situated proximate to the second focal spot and being of such a geometrical shape so as to maximize light throughput while meeting light field edge contrast requirements. In another light system, the optical concentrator comprises a reflector comprising a quasi-ellipsoidal portion within which the light source is situated, a cylindrical portion situated between the quasi-ellipsoidal portion and the shield for reflecting stray light, a back reflector portion situated proximate to the shield, and a centrally-mounted portion situated between the aperture and the light source for directing back-reflected light in the direction of the aperture.